

JONES & BEACH ENGINEERS, INC.

85 Portsmouth Avenue
Post Office Box 219
Stratham, NH 03885
Telephone: (603) 772-4746
Fax: (603) 772-0227

Post Office Box 484
Alton, NH 03809
Email: jbe@jonesandbeach.com
http://www.jonesandbeach.com

January 27, 2014

Town of Barrington
Attn. Marcia Gasses
333 Calef Highway (Route 125)
PO Box 660
Barrington, NH 03825

LAND USE OFFICE

JAN 23 2014

RECEIVED

**RE: Review Response Letter - Proposed Gas Station & Convenience Store
PB Case #SR 12/410
Calef Highway (Route 125), Barrington, NH
Tax Map 238 Lot 4
JBE Project No. 10144**

Dear Ms. Gasses,

Jones & Beach Engineers, Inc., is in receipt Engineering Review Comments from Jeffrey Adler, PE, of DuBois & King, Inc., dated December 12, 2013, their comments are in italics and we offer the following responses on bold:

- 1. The cueing plan shows that 6 vehicles can be accommodated from the menu board without blocking any parking spaces. It appears that probably another 3 could be accommodated between the menu board and window. We previously noted that if it is intended to sell coffee at the drive-thru window, cueing of 10-15 vehicles (from the window) is common. We recommend that the drive-thru use be identified, and that a drive-thru lane of appropriate length be designed in a manner that does not conflict with parking or circulation patterns. (REPEAT COMMENT) Should the Board choose to approve this layout, we recommend that the drive-thru lane be striped and marked as such, so that drivers who choose to park in the 5 spaces understand that they may be temporarily blocked, and so that drivers waiting for the drive-thru keep left (instead of right, as they might otherwise be accustomed) allowing circulation to the rear of the site.*

Response: Sufficient vehicle cueing spaces have been provided. Striping suggestions proposed by the reviewer have been incorporated into the revised plans.

- 2. The sidewalk dimension is not labeled along the south side of the building, but the engineer states in the response letter that the dimension is 5.5'. (REPEAT COMMENT) Most recently, curb stops have been added to meet the objective of Articles 4.9.2.4 and 4.9.5.4. To facilitate proper construction, we recommend that a detail be added to the plan set showing the dimensions and material of the curb stop, and the relations hip of the curb stop to the curb.*

Response: The required detail has been added to the revised plans, see D1 - Detail Sheet.

3. According to Article 4.9.13.1, the maximum allowable parking is 10% over the calculated value, which in this case is 40 spaces, for a maximum of 44 spaces. The Planning Board will need to consider their request for 58 spaces between the two lots where a maximum of 44 are allowed. It is noted that the convenience store/fast food along requires 33 spaces, and 28 are provided exclusive of the spaces included in the parking easement to the grocery store. (REPEAT COMMENT)

Response: As depicted on sheet C3, the proposed convenience store requires 33 space, 37 spaces are proposed, which is within the 10% maximum allowed. The historical needs of Map 238 Lot 5 is in excess of 18 spaces, therefore parking easements have been proposed on Map 238 Lot 4.

4. The Drainage Analysis shows an increase in runoff at Analysis Point #3, the catch basin behind the church. We recommend that the design be revised to meet the requirements of Article 4.7.1.1. (REPEAT COMMENT) It is further noted that there is a very minor increase (0.01 cfs) at Analysis Point #4 in the 25- and 50- year storms.

Response: As previously discussed, the proposed increase in stormwater runoff to Map 235 Lot 83 is a result of the drive connection to Map 235 Lot 83.

5. As drainage is directed across the church property, we recommend that the applicant obtain and depict on the plan the appropriate drainage rights, pursuant to Article 4.7.1.5.

Response: No drainage from the proposed convenience store is directed to Map 235 Lot 83. On-site drainage is collected in the closed drainage system prior to exiting to Map 235 Lot 83.

6. The Drainage Analysis narrative states that Analysis Point #3 is located along the northern property line. We recommend that this description be revised to reflect that the catch basin is the analysis point.

Response: The drainage narrative has been updated as requested.

7. The velocity requirements of Article 4.7.7.2 are not met by the proposed design. (REPEAT COMMENT) We understand that the engineer plans to request a waiver from the Planning Board. Should the Board choose to grant such a waiver, we recommend that appropriate language be added to the plans and Operations and Maintenance Manual advising the responsible party that additional maintenance may be required for the drainage system.

Response: The suggested language has been added to the plan and Operations and Maintenance Manual.

8. Article 4.7.7.3 requires a 36" minimum depth of cover. (REPEAT COMMENT) We understand that a waiver will be requested from this requirement. In considering this waiver, the Board should be aware that less cover will make the pipe more susceptible to freezing, and make the pavement more susceptible to damage caused by freeze/thaw cycles. Should the Board choose to grant this waiver, we recommend that the appropriate language be added to the plans requiring the applicant to make prompt repairs to any damage that is caused to the pavement.

Response: The suggested language has been added to the plans, see Note #30 on Sheet C4.

9. The shallow catch basin detail should be amended to include a polyethylene liner downspout in accordance with Article 4.7.8.

Response: The shallow catch basin detail has been updated as requested.

10. We recommend that the engineer add the weir lengths to the details for DMH #1 and #9, so that this component is constructed in conformance with the drainage calculations.

Response: Weir lengths have been added to the details for DMH #1 and DMH #9 as requested.

11. We recommend that the landscape architect confirm that the specified plantings are suitable for the 2:1 slope. (REPEAT COMMENT)

Response: A note indicating the proposed plantings are suitable on the proposed slopes has been included in the landscape drawings.

12. The lighting plan (sheet L1) is not stamped by an electrical engineer (REPEAT COMMENT) The engineer points out that this has been discussed with the Board.

Response: This issue was previously addressed with the Board.

13. We recommend that a reduced-size site plan be attached to the Operation and Maintenance manual depicting the location and quantity of each component for use by personnel performing the inspections. (REPEAT COMMENT) The engineer has agreed to include the site plan set in the Operations Maintenance Manual.

Response: A reduced-size site plan will be included with the Operation & Maintenance Manual.

14. The southerly limit of the water easement appears to have been deleted from Sheet C3.

Response: The proposed easement has been updated as requested.

15. The text "SGC" appears on the landscaped area near the site entrance. If it is still intended that the curbing for the 5 parking spaces for the grocery store be sloped granite, we recommend that this text be shifted to the new location of curbing. Otherwise, the text should be deleted.

Response: This text has been relocated as requested.

16. Pursuant to our previous letter, three parking spaces were removed from the site plan. We recommend that Sheet L3.0 be updated to show the proposed landscape improvements in this location. We also noted that Sheet L3.0 depicts the stop bar extending across the entire width of the northerly driveway. We recommend that this sheet be revised to match the other sheets in the plan set.

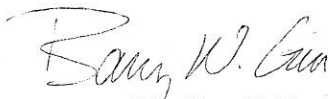
Response: The landscape plan has been updated as requested.

In addition, the proposed water supply system details have been included in the revised plan set, as requested by the Planning Board.

We enclose twelve reduced size copies and four full size copies of revised site plans, a revised Drainage Analysis and Stormwater Management/Spill Prevention Manual for the above referenced project. If you have any questions, or need further assistance, please contact our office. Thank you very much for your time.

Very truly yours,

JONES & BEACH ENGINEERS, INC.



Barry W. Gier, P.E.
Senior Project Manager

cc: Jeffrey Adler, DuBois & King, Inc.
The Three Socios, LLC

LAND USE OFFICE

JAN 28 2014

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